

Efficacy Against Cervical Disease in Subjects with Prior Vaccine HPV Type Infection

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Objective: In the international clinical program for the quadrivalent (types 6/11/16/18) HPV vaccine, 73% of women aged 16–26 were naïve to all vaccine HPV types. In these women, prophylactic administration of the vaccine was highly effective in preventing HPV 6/11/16/18-related cervical disease. In contrast, the vaccine did not demonstrate therapeutic efficacy. At the time of vaccination, 15% of women had evidence of past cleared infection with one or more vaccine HPV types (seropositive and DNA negative). Here we present an analysis in this group of women to determine the efficacy of the HPV 6/11/16/18 vaccine against new cervical disease related to the same vaccine HPV type which had previously been cleared.

Materials and Methods: 18,150 women were enrolled in 1 of 3 large clinical studies. Data are representative of a subset of these subjects who were HPV seropositive and DNA negative at enrollment (for ≥ 1 vaccine type). In each study, subjects were randomized in a 1:1 ratio to receive HPV 6/11/16/18 vaccine or placebo at day 1, month 2 and month 6. Procedures performed for efficacy data evaluation included detailed genital examination, Pap testing, and collection of cervicovaginal specimens. Analyses of efficacy were carried out in a prophylactic population stratified by HPV serology and cervical DNA status on day 1.

Results: Subjects were followed for an average of 44 months. Seven subjects in the placebo group developed cervical disease related to a vaccine HPV type they had previously encountered and cleared. No subject receiving HPV 6/11/16/18 vaccine developed disease to a vaccine HPV type to which they were seropositive and DNA negative at enrolment (vaccine efficacy: 100% (95% CI: 28.7, 100.0)).

Conclusion: These results suggest that infection-elicited antibodies may not provide complete protection over time, and that HPV 6/11/16/18 vaccine may prevent recurrence of disease with vaccine HPV types.

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The Effectiveness of the Universal Infant Immunization Against Hepatitis B in Bulgaria

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Background: Bulgaria is a country in an area of intermediate endemicity of Hepatitis B viral (HBV) infection, with 3–5% HBV carrier prevalence and more than 30% of the population with serological evidence of HBV infection. Because of the evidence of occurrence of perinatal transmission (up to 23.4% of carrier mothers were HBeAg positive), a strategy for selective immunization of high risk newborns to HBV carrier mothers was implemented from January 1988 to July 1991,

as early as August 1991. Since that time, the effectiveness of Hepatitis B immunization programme has been subject to a nation-wide, prospective surveillance. The aim of the present study is to analyze the changes in HBV epidemiology 16 years after the start of the programme for routine infant HBV vaccination.

Methods: The analysis is based on the data for age-specific annual incidence of acute clinically manifested cases of HBV infection, obtained from the National communicable disease surveillance system which is requiring compulsory notification and laboratory confirmation of all acute HBV cases. The data on immunization coverage are obtained from the Immunization information system.

Results: Before the introduction of the immunization, the incidence of HBV infection in newborns and children 1–3 years of age was 31.1 and 31.6 per 100 000, respectively. The incidence was highest in persons 4–7, 15–19 and 20–29 years of age: 59.9; 50.0 and 50.2 per 100 000, respectively. During 1988–1991, the period of selective immunization, the HBV incidence declined (40.9%) only in infants. The greatest decline of acute Hepatitis B in Bulgaria occurred 16 years after the start of the universal infant vaccination. Among children 0 to 14 years of age, HBV incidence was 2.6 per 100 000 in 2007 and the decline (94.2%) coincided with the increase of the cumulative number of immunized infants. As of 2007, a total of 1 068 240 children had been fully vaccinated with 3 doses of HBV vaccine.

Conclusion: To date, the immunization strategy focusing on universal infant vaccination beginning at birth has been implemented with considerable success in Bulgaria.

The introduced in 1992 immunization programme dramatically reduced the incidence of acute Hepatitis B in targeted age groups; this effect will be fully achieved in 2011, when all adolescents up to 19 years of age will be immunized.

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Boutonneuse Fever Issues in Constantza County

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Introduction: Boutonneuse fever is an eruptive disease endemic in Mediterranean basin. Constantza, remain the most important rickettsian endemic zone because the climacterics conditions and the increased number of stray dogs.

Material and methods: The diagnostic was made on clinical and epidemiological dates.

Results: 80% of patients recognized the presence of the dog, and 45% the bites or presence of the ticks. 78% of cases were from urban environment. The adults were prevalent affected 86%, 2:1 for women, children made easy form and the adults' medium. Few cases were severe, with neurological complications. The clinical evolution of the patients with treatment was favorable, improvement of the illness appeared after 3–4 days. The number of cases continuously